Research

USDA Forest Service Research and Development, U.S. Geological Survey, and the Joint Fire Science Program are the three primary federal organizations that carry out fire-related research and development for use by agency managers, communities, and industry. Colleges and universities and other partners also contribute greatly to wildland fire research. These organizations often leverage and complement each other to accomplish research goals. A Fire Research Coordination Council comprising leaders of major fire research programs guides fire science and technology transfer efforts.

Forest Service research teams continued to study the various aspects of wildland fire management including firefighter and public safety, fire weather and behavior, smoke dispersion, and post-fire susceptibility to invasive species. They have also initiated the Encyclopedia of Southern Fire Science, a project to synthesize a large body of fire science into a fully linked and searchable hypertext system via the internet.

The Joint Fire Sciences Program (JFSP) funded 56 new research projects in support of hazardous fuels reduction, post-fire rehabilitation, and smoke management. Recommendations generated from these studies have already been incorporated into the incident response pocket guide and current wildland firefighting training curriculum. Examples of tools generated by Forest Service and JFSP research teams include integrated fire and weather maps to generate 3-12 month fire forecasts; imagery-based, burn-severity maps used by Burned Area Emergency Response teams; and a fiberboard structural product made from low or no value material obtained from hazardous fuels treatments. Accomplishments for the JFSP are included in the **2005 Joint Fire Science Program Business Summary**.

The FS applied research projects, in partnership with several universities and state forestry agencies, aim to conduct and evaluate different land management practices that reduce problems associated with the current outbreaks of insects and diseases and to translate that information for practicing professionals, landowners, and the public. Forest Service research teams are currently conducting 11 silvicultural assessments. The teams are studying a diverse range of issues. Studies range from Gypsy Moth and Oak Decline on the Daniel Boone National Forest, the Hemlock Woolly Adelgid on the Allegheny National Forest, to Stand and Landscape Visualization Systems and Remote Sensing of Forest Vegetation Structure. A summary of on-going projects can be viewed at www.healthyforests.gov.